



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22303-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,533	12/26/2001	Walter Hartner	Z&PINFN10277	3654

7590

06/06/2003

LERNER AND GREENBERG, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480

EXAMINER

TALBOT, BRIAN K

ART UNIT	PAPER NUMBER
----------	--------------

1762

DATE MAILED: 06/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,533

Applicant(s)

HARTNER ET AL.

Examiner

Brian K Talbot

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1762

1. Claims 1-34 remain in the application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, the term "producing" is vague and indefinite. How and what is meant by the term "producing". It is unclear as to what the claim encompasses.

The term "the precious metal material" lacks antecedent basis. Furthermore, is this the same as the "catalytic active precious metal material"?

The term "passing" is vague and indefinite. It is unclear what the term "passing" encompasses.

The term "insulation region" lacks antecedent basis.

With respect to claims 4 and 5, the term "passing" is vague and indefinite. It is unclear what the term "passing" encompasses.

With respect to claim 6, the term "Cp" and "Cp*" are unclear.

With respect to claims 12 and 13, the claims are unclear. Are the "elements" listed included "before" or "after" the step of depositing selectively?

Art Unit: 1762

With respect to claims 14 and 30, the term "precious metals" is unclear. Which "precious metals" is being referred to, the step of "applying" or "depositing selectively"?

With respect to claims 16 and 32, the term "hard" is a relative term and is therefore indefinite. The claims and specification fail to define the term.

With respect to claim 17, the phrase "insulation region" lacks antecedent basis.

With respect to claim 19 and 20, the term "producing" is confusing. Is a catalytic site not "produced" in the applying step?

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu (5,320,978) in combination with Xue et al. further in combination with Ha et al. (5,970,309) or JP 09-289,291 or JP 08-222,711.

Hsu (5,320,978) teaches a method for selective deposition of platinum on a substrate. The substrate is prepared having catalytic areas and non-catalytic areas and applying platinum metal to the catalytic areas. (col. 2, line 16 – col. 4, line 27 and Fig. 1).

Art Unit: 1762

Hsu (5,320,978) fails to teach the platinum layer being formed from organometallic precursors.

Xue et al. teaches forming platinum layer from organometallic precursors for selective deposition at temperature ranges from 25-180°C (entire reference).

Therefore, it would have been within the skill of one practicing in the art to have modified Hsu (5,320,978) process by utilizing the organometallic precursors as evidenced by Xue et al. with the expectation of achieving similar success. In addition, selective deposition would obviate the need for subsequent etching steps which would save time and money.

Hsu (5,320,978) in combination with Xue et al. fail to teach "producing" catalytic and non-catalytic sites by planarizing or patterning.

Ha et al. (5,970,309) (see Fig. 2) or JP 09-289,291 (see abstract) or JP 08-222,711 (see Figs. 6,10,13 and 16 and abstract) all teach ferroelectric capacitors whereby a planarizing and/or patterning step is taught to form "catalytically" active areas and non-catalytic areas whereby the an electrode is formed thereon the catalytic areas.

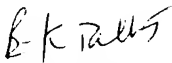
Therefore, it would have been obvious for one skilled in the art at the time the invention was made to have modified Hsu (5,320,978) in combination with Xue et al. process by incorporating a planarizing/patterning step as evidenced by Ha et al. (5,970,309) or JP 09-289,291 or JP 08-222,711 with the expectation of achieving the desired end product, i.e. a surface having active and non-active sites for electrode formation.

Art Unit: 1762

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Talbot whose telephone number is (703) 305-3775. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3775.


Brian K Talbot
Primary Examiner
Art Unit 1762

BKT
June 3, 2003